

ABSTRACT OF THE DISCLOSURE

A biosensor protein comprising (1) and (2) below:

(1) a modified fluorescent protein which is obtained by  
cleaving amino acid sequence of green fluorescent  
5 protein or its derivative in the vicinity of a hotspot  
amino acid residue which affects the fluorescence  
property, and modifying the structure of the green  
fluorescent protein or its derivative, and (2) one or  
more functional molecules which are capable of  
10 transmitting their conformational changes to the  
modified fluorescent protein to cause a conformational  
change of the modified fluorescent protein, thereby  
altering the fluorescence property of the modified  
fluorescent protein.